

IB Series



- Single Ungregulated Output
- SIP or DIP Package
- Industry Standard Pinout
- 1.0kV DC Isolation
- -40 °C to +85 °C Operation
- MTBF >1.1 Mhrs
- 3 Year Warranty

Specification

Input

- Input Voltage Range • Nominal $\pm 10\%$
- Input Reflected Ripple Current • 20mA pk-pk through 12 μ H inductor, 5Hz to 20MHz
- Input Reverse Voltage Protection • None

Output

- Output Voltage • See table
- Minimum Load • None⁽²⁾
- Line Regulation • 1.2%/1% ΔV_{in}
- Load Regulation • 10% for a 20-100% load change⁽²⁾ (3.3V models $\pm 20\%$)
- Setpoint Accuracy • $\pm 3\%$
- Ripple & Noise • 75mV pk-pk max, 20MHz bandwidth
- Temperature Coefficient • 0.02%/°C
- Maximum Capacitive Load • 220 μ F

General

- Efficiency • See table
- Isolation Voltage • 1000VDC minimum
- Isolation Resistance • 10⁹ Ω
- Isolation Capacitance • 60pF typical
- Switching Frequency • 40-160 KHz variable
- MTBF • >1.1 Mhrs to MIL-HDBK-217F at 25 °C, GB

Environmental

- Operating Temperature • -40°C to +85°C
- Storage Temperature • -40°C to +125°C
- Case Temperature • 100°C max
- Cooling • Convection-cooled

Safety

- Safety Agency • UL60950-1 & CAN/CSA C22.2 No. 60950-1; UL62368-1, CE & UKCA meets all applicable directives & legislation.

Notes

1. Replace 'S' in model number with 'D' for DIP package.
2. Operation at no load will not damage unit but it may not meet all specifications.
3. All dimensions in inches (mm).
4. Pin pitch tolerance: ± 0.014 (± 0.35)
5. Case tolerance: ± 0.02 (± 0.5)
6. Weight: SIP 0.006 lbs (2.6 g), DIP 0.005 lbs (2.3 g)

Input Voltage ⁽⁴⁾	Output Voltage	Output Current	Efficiency	Model Number ⁽¹⁾
5 VDC	3.3V	303mA	75%	IB0503S
	5.0V	200mA	78%	IB0505S
	9.0V	111mA	75%	IB0509S
	12.0V	84mA	76%	IB0512S
	15.0V	66mA	76%	IB0515S
	24.0V	42mA	72%	IB0524S
12VDC	3.3V	303mA	74%	IB1203S
	5.0V	200mA	74%	IB1205S
	9.0V	111mA	75%	IB1209S
	12.0V	84mA	77%	IB1212S
	15.0V	66mA	78%	IB1215S
	24.0V	42mA	75%	IB1224S
24VDC	3.3V	303mA	75%	IB2403S
	5.0V	200mA	77%	IB2405S
	9.0V	111mA	75%	IB2409S
	12.0V	84mA	78%	IB2412S
	15.0V	66mA	78%	IB2415S
	24.0V	42mA	78%	IB2424S

Mechanical Details

